

BIOGRAPHICAL SKETCH

NAME: William P. Watkinson

POSITION TITLE: Research Physiologist

EDUCATION/TRAINING

Institution	Degree	Year	Field of Study
United States Military Academy	B.S.	1970	Math/Applied Engineering
University of Virginia	Ph.D.	1978	Cardiovascular Physiology

PROFESSIONAL EXPERIENCE:

1973-1978 University of Virginia, Department of Physiology, School of Medicine Graduate Student.

1978-1978 Duke University Medical Center, Department of Medicine, Cardiovascular Division
Postdoctoral Fellow.

1980-present United States Environmental Protection Agency, ORD/NHEERL/ETD Research Physiologist.

PROFESSIONAL SOCIETIES:

American Physiological Society

Federation of American Societies for Experimental Biology

North Carolina Society of Toxicology

RECENT AWARDS AND HONORS:

Top Ten Most Cited Papers – Toxicological Sciences, 2003

Special Honor Award, Gold Medal – U.S.E.P.A., 2003

RECENT INVITED LECTURES/SYMPOSIA:

Cardiac and thermoregulatory effects following exposure to particulate matter in healthy and compromised rats. Society of Toxicology, Symposium, Philadelphia, PA, 2000.

Systemic responses to ozone. American Thoracic Society, Workshop, Scottsdale, AZ, 2000.

Cardiac and thermoregulatory responses to exposure to particulate matter in different rodent models of cardiopulmonary disease. U.S.E.P.A., Workshop, Chapel Hill, NC, 2000.

Cardiac and thermoregulatory effects following exposure to particulate matter in healthy and compromised rats. University of Rochester/U.S.E.P.A., Workshop, Rochester, NY, 2001.

Cardiac and thermoregulatory responses to inhaled pollutants in healthy and compromised rodents: Modulation via interaction with environmental factors. Experimental Biology, Symposium, Orlando, FL, 2001.

Cardiovascular and systemic responses to inhaled pollutants in rodents: Effects of ozone and particulate matter. Raleigh-Durham Telemetry Users Group, Workshop, Research Triangle Park, NC, 2002.

Effects of acute and subchronic exposure to concentrated ambient particulates in healthy and compromised rodents. American Association for Aerosol Research, Conference and Workshop, Pittsburgh, PA, 2003

Telemetric monitoring of physiological events in rodents. Charles River Laboratories, Shortcourse, Danvers, MA, 2003

ASSISTANCE/LEADERSHIP PROVIDED TO THE SCIENTIFIC COMMUNITY:

American Physiological Society – Cardiovascular Section

American Physiological Society – Respiratory Section

American Physiological Society – Environmental and Exercise Section

Attendee and/or Presenter at sixteen Workshops, Conferences, or Symposia (1997–present)

Reviewer for twelve different scientific journals (1997–present)

ASSISTANCE/LEADERSHIP PROVIDED TO THE AGENCY:

Goals Focus Strategic Plan Team – National Health and Environmental Effects Research Laboratory

Particulate Matter Strategy Group; Co-chair – Pulmonary Toxicology Branch

Ozone Research Strategy Group – Office of Research and Development

Goal 8: Susceptibility Strategy Group – National Health and Environmental Effects Research Laboratory

Reviewer for Particulate Matter Criteria Document

RECENT SELECTED PUBLICATIONS (From January 1, 1998 to present, out of a total of 51 publications):

1. Costa, D.L., S.H. Gavett, U.P. Kodavanti, W.P. Watkinson, J.A. Dye, and K.L. Dreher. Ambient particulate matter and health: What are the animals telling us? In: *Relationships Between Respiratory Disease and Exposure to Air Pollution*. (U. Mohr, D.L. Dungworth, J.D. Brain, K.E. Driscoll, R.C. Grafstrom, and C.C. Harris, eds.), pp. 185–194, ILSI Press, Washington, 1998.
2. Watkinson, W.P., M.J. Campen, and D.L. Costa. Cardiac arrhythmia induction after exposure to residual oil fly ash particles in a rodent model of pulmonary hypertension. *Toxicological Sciences* 41:209–216, 1998.
3. Campen, M.J., D.L. Costa, and W.P. Watkinson. Cardiac and thermoregulatory toxicity of residual oil fly ash in cardiopulmonary-compromised rats. In: *Proceedings of the Third Colloquium on Particulate Matter and Human Health*. (R.F. Phalen and Y.M. Bell, eds.), pp. 8–6–8–35, Air Pollution Health Effects Laboratory, University of California, Irvine, CA, 1999.
4. Kodavanti, U.P., M.C. Jackson, A.D. Ledbetter, J.R. Richards, S.Y. Gardner, W.P. Watkinson, M.J. Campen, and D.L. Costa. Lung injury from intratracheal and inhalation exposures to residual oil fly ash in a rat model of monocrotaline-induced pulmonary hypertension. *J. Toxicol. Environ. Health* 57:543–563, 1999.
5. Watkinson, W.P., M.J. Campen, K.L. Dreher, W-Y. Su, U.P. Kodavanti, J.W. Highfill, and D.L. Costa. Thermoregulatory effects following exposure to particulate matter in healthy and cardiopulmonary-compromised rats. *J. Thermal Biol.* 25:131–137, 2000.
6. Watkinson, W.P., M.J. Campen, J.P. Nolan, U.P. Kodavanti, K.L. Dreher, W-Y. Su, J.W. Highfill, and D.L. Costa. Cardiovascular effects following exposure to particulate matter in healthy and cardiopulmonary-compromised rats. In: *Relationships between Acute and Chronic Effects of Air Pollution*. (U Heinrich and U Mohr, eds.). pp. 447–463, ILSI Press, Washington, 2000.
7. Campen, M.J., J. Norwood, J.L. McKee, R. Mebane, G.E. Hatch, and W.P. Watkinson. Ozone-induced hypothermia and bradycardia in rats and guinea pigs in nose-only or whole-body inhalation systems. *J. Thermal Biol.* 25:81–89, 2000.
8. Campen, M.J., D.L. Costa, and W.P. Watkinson. Cardiac and thermoregulatory toxicity of residual oil fly ash in cardiopulmonary-compromised rats. *Inhalation Toxicology* 12:7–22, 2000.
9. Kodavanti, U.P., M.C. Schladweiler, A.D. Ledbetter, W.P. Watkinson, M.J. Campen, D.W. Winsett, J.R. Richards, K.M. Crissman, G.E. Hatch, and D.L. Costa. The spontaneously hypertensive rat as a model of human cardiovascular disease: Evidence of exacerbated cardiopulmonary injury and oxidative stress from inhaled emission particulate matter. *Toxicol. Appl. Pharmacol.* 164:250–263, 2000.
10. Watkinson, W.P., M.J. Campen, J.P. Nolan, and D.L. Costa. Cardiovascular and systemic responses to inhaled pollutants in rodents: Effects of ozone and particulate matter. *Environ. Health Perspect.* 109:539–546, 2001.
11. Watkinson, W.P., M.J. Campen, L.B. Wickers, J.P. Nolan, U.P. Kodavanti, and D.L. Costa. Impact of toxic agents or adverse conditions on thermoregulatory function in awake rodents. *J. Thermal Biol.* 26:331–338, 2001.
12. Campen, M.J., J.P. Nolan, M.C.J. Schladweiler, U.P. Kodavanti, P.A. Evansky, D.L. Costa, and W.P. Watkinson. Cardiovascular and thermoregulatory effects of inhaled PM-associated transition metals: Demonstrating a synergism between nickel and vanadyl sulfate. *Toxicological Sciences* 64:243–252, 2001.
13. Campen, M.J., J.P. Nolan, M.C.J. Schladweiler, U.P. Kodavanti, D.L. Costa, and W.P. Watkinson. Cardiac and thermoregulatory effects of instilled particulate matter-associated transition metals in healthy and cardiopulmonary-compromised rats. *J. Toxicol. Environ. Health* 65:1615–1631, 2002.
14. Kodavanti, U.P., M.C.J. Schladweiler, A.D. Ledbetter, W.P. Watkinson, M.J. Campen, D.W. Winsett, J.R. Richards, K.M. Crissman, G.E. Hatch, D.L. Costa. Temporal association between pulmonary and systemic effects of particulate matter in healthy and cardiovascular compromised rats. *J. Toxicol. Environ. Health* 65:1545–1569, 2002.
15. Watkinson, W.P., M.J. Campen, L.B. Wickers, J.P. Nolan, and D.L. Costa. Cardiac and thermoregulatory responses to inhaled pollutants in healthy and compromised rodents: Modulation via interaction with environmental factors. *Environ. Res.* 92:35–47, 2003.